

REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the following remarks is respectfully requested. Claims 24-31 are currently active in this case.

In the outstanding office action, Claims 24 and 31 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0147574 to Lam; Claims 25 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lam in view of U.S. Patent Application Publication No. 2003/0190107 to Walker; and Claims 26, 27, 29, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lam in view of U.S. Patent No. 5,999,287 to Davies.

Briefly recapitulating, the present invention (Claim 24) is directed to a traveling-wave Electroabsorption modulator (“TW-EAM”) having two primary functions as an optical signal detector and as an optical modulator. The TW-EAM includes four ports. A first electrical port is configured to receive a first electrical signal, a first optical port is configured to receive a first optical signal; a second electrical port is configured to output a second electrical signal extracted by absorbing the first optical signal; and a second optical port is configured to output a second optical signal obtained by modulating the first optical signal based on the first electrical signal.

In contrast thereto, Lam et al. ‘574 disclose an optical wavelength 10. Lam et al. ‘574 further disclose v9 microwave signal 14 which is received by a transmission line 15. The metallic transmission line 15 has opposing first and second ends. However, the second end of the metallic transmission line 15 is electrically coupled to a metal ground through a load. The second end of the metallic transmission line 15 is thus not configured to output an electrical signal. The output electrical signal generates heat that is disposed.

Lam et al. ‘574 also disclose an optical input 16 and an optical output 17. Applicants respectfully submit that Lam et al. ‘574 fails to teach or suggest “*the second electrical port*

*configured to output a second electrical signal extracted by absorbing the first optical signal."* The second end of the metallic transmission line 15 is not configured to output any type of electrical signal. Namely, the second end of the metallic transmission line 15 is not configured to output a second electrical signal extracted by absorbing the first optical signal.

For the foregoing reasons, Lam et al. '574 is not believed to anticipate or render obvious the subject matter defined by claim 24. Claim 31 depends from claim 24. Claims 24 and 31 are thus believed to be allowable. Dependent claims 25 and 27-31 are believed to be allowable for at least the same reasons that claim 24 is believed to be allowable.

For the foregoing reasons, the application is believed to be in condition for allowance. An early and favorable action is respectfully requested.

Respectfully submitted,

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